

ABSTRACTCOMMUNICATION METHODS AND APPARATUS

In a wireless communications system, transceivers transmit short  
5 bursts to a base station, which determines timing corrections from the time of  
receipt of the burst and transmits the timing corrections to the respective  
transceivers. In one aspect, the base station indicates to the transceivers a  
plurality of time slots, each transceiver selects one of the time slots at random,  
formats a burst including an indicator of the selected time slot and transmits  
10 the burst in that slot. In another aspect, the base station transmits to each  
transceiver a timing uncertainty value, which determines how the timing  
correction will be modified by the transceiver as the interval since last  
receiving a timing correction increases. Data bursts are transmitted in a  
format comprising a first unique word, a content field and a second unique  
15 word, in that order. The bursts are transmitted in a TDMA channel format  
which can accommodate both short and long bursts in a block format of  
constant periodicity.